

Remarks

Claims 1-3, 7-11, 13, 14, 17, 18, 33-35, 39, 41, 43, 44 and 47 are pending and under examination. Applicants have not cancelled, amended or added any claims herein.

Restriction Requirement Under 35 U.S.C. §121

The September 19, 2006 Office Action imposes a restriction requirement under 35 U.S.C. §121 of the claims to one of the following three (3) groups:

- I. Claims 1-3, 7-11, 13, 14, 17 and 18, drawn to methods for covalently affixing a biomolecule to a second molecule having an azido group and another biomolecule having an alkynyl group;
- II. Claims 33-35, 39, 41, 43 and 44, drawn to methods for covalently affixing a biomolecule to a solid surface having an alkynyl group; and
- III. Claim 47, drawn to a method for covalently affixing a biomolecule to a solid surface having an azido group.

In the September 19, 2006 Office Action, the Examiner has also alleged that the following species for Groups I and II are patentability distinct:

Group I

- I. Second biomolecule is immobilized (claim 10 in part)
  - A. Species of biomolecule
    - a. Nucleic Acid (claims 2 and 18 in part)
      - i. DNA (claim 3 in part)
    - b. Protein (claims 2 and 18 in part)
    - c. Carbohydrate (claims 2 and 18 in part)
    - d. Lipid (claims 2 and 18 in part)
  - B. Species of second molecule
    - a. Biomolecule (claim 7 in part)

- b. Fluorescent Label (claim 7 in part)
- c. Radiolabeled molecule (claim 7 in part)
- d. Dye (claim 7 in part)
- e. Chromophore (claim 7 in part)
- f. Affinity label (claim 7 in part)
- g. Dextran (claim 7 in part)
- h. Antibody (claim 8 in part)
- i. Biotin (claim 8 in part)
- j. Streptavidin (claim 8 in part)
- k. Metabolite (claim 8 in part)

II. Neither the biomolecule nor the second biomolecule is immobilized (claim 11 in part)

- A. Species of biomolecule
  - a. Nucleic Acid (claims 2 and 18 in part)
    - i. DNA (claim 3 in part)
  - b. Protein (claims 2 and 18 in part)
  - c. Carbohydrate (claims 2 and 18 in part)
  - d. Lipid (claims 2 and 18 in part)
- B. Species of second molecule
  - a. Biomolecule (claim 7 in part)
  - b. Fluorescent molecule (claim 7 in part)
  - c. Radiolabeled molecule (claim 7 in part)
  - d. Dye (claim 7 in part)
  - e. Chromophore (claim 7 in part)
  - f. Affinity label (claim 7 in part)
  - g. Dextran (claim 7 in part)
  - h. Antibody (claim 8 in part)
  - i. Biotin (claim 8 in part)
  - j. Streptavidin (claim 8 in part)
  - k. Metabolite (claim 8 in part)

Group II

- A. Species of biomolecule
  - a. Nucleic Acid (claim 34 in part)
    - i. DNA (claim 35 in part)
  - b. Protein (claim 34 in part)
  - c. Carbohydrate (claim 34 in part)
  - d. Lipid (claim 34 in part)
- B. Species of a solid surface
  - a. Glass (claim 39 in part)
  - b. Silica (claim 39 in part)
  - c. Diamond (claim 39 in part)
  - d. Quartz (claim 39 in part)
  - e. Gold (claim 39 in part)
  - f. Silver (claim 39 in part)
  - g. Metal (claim 39 in part)
  - h. Polypropylene (claim 39 in part)
  - i. Plastic (claim 39 in part)
- C. Species wherein solid surface is present on a

- a. Bead (claim 41 in part)
- b. Chip (claim 41 in part)
- c. Wafer (claim 41 in part)
- d. Filter (claim 41 in part)
- e. Fiber (claim 41 in part)
- f. Porous media (claim 41 in part)
- g. Column (claim 41 in part)

With regard to Group I, the Examiner has further required election of a single species of immobilized or non-immobilized biomolecule and then a further election of biomolecule and second molecule. With regard to Group II, the Examiner has required election of a single specified species of biomolecule, solid surface and item where the solid surface is present. The Examiner further stated that upon allowance of a generic claim, applicants will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of the allowable generic claim.

In response to this restriction requirement, applicants hereby elect, with traverse, to prosecute the invention of Examiner's claim group II, i.e. claims 33-35, 39, 41, 43 and 44 drawn to methods for covalently affixing a biomolecule to a solid surface having an alkynyl group. In addition, applicants hereby elect, with traverse, the species of biomolecule nucleic acid, species of solid surface plastic and species wherein the solid surface is on a bead.

Applicants note that 35 U.S.C. §121 states, in part, that "[i]f two or more independent and distinct inventions are claimed in one application, the Commissioner may require application to be restricted to one of the inventions." [Emphasis added]. Applicants request that the restriction requirement be withdrawn in view of the fact that the claims of Groups I-III are not independent.

Under M.P.E.P. §802.1, "independent" means "there is no disclosed relationship between the subjects disclosed, that is, they are unconnected in design, operation, and effect...". The claims of Group I-III are related in that they are drawn to similar compounds, compositions, and methods of use. All of the methods are directed to covalently affixing a biomolecule to a second molecule or a solid surface. In addition, the claims of both groups II and III are directed to covalently affixing a biomolecule to a solid surface.

Applicants therefore respectfully assert that two or more independent and distinct inventions have not been claimed in the subject application because the groups are not independent under M.P.E.P. §802.01. Therefore, restriction is improper under 35 U.S.C. §121.

Additionally, applicants point out that under M.P.E.P. §803, the Examiner must examine the application on the merits, even though it includes claims to distinct inventions, if the search and examination of an application can be made without serious burden. There are two criteria for a proper requirement for restriction, namely (1) the invention must be independent and distinct; AND (2) there must be a serious burden on the Examiner if restriction is not required.

Applicants maintain that there would not be a serious burden on the Examiner if restriction were not required. A search of prior art with regard to any of Groups I-III would identify art for the other Groups. Since there is no serious burden on the Examiner to examine Groups I-III in the subject application, the Examiner must examine the entire application on the merits. In addition, applicant notes that a search of the prior art with regard to group II would identify art for groups I and III and vice versa.

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Applicants maintain that the pending claims define a single inventive concept. Accordingly, applicants respectfully request that the Examiner reconsider and withdraw the restriction requirement and examine the pending claims on the merits.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

No fee, other than the enclosed \$225.00 fee for a two-month extension of time, is deemed necessary in connection with the filing of this Communication. However, if any additional fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to:  
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